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ABSTRACT

A description is provided of a course, developed by the British Council in Madrid, Spain, to improve the English language training for trainee air traffic services personnel as a result of an increased demand for trained controllers over the next few years. The course aims to teach students in the areas of standard radiotelephony, non-routine language, and "general" English. The course requires 160 hours of instruction and is divided into four parts: (1) Communicative Tasks; (2) Exercises and Activities; (3) Live Recording Exercises; and (4) Simulated Recordings. A group of 56 communicative tasks forms the backbone of the course. These tasks represent all the parts of a normal flight, and each part has one routine task and one or more non-routine/emergency task(s). Another section of the course contains a variety of exercise types and activities to be used at intervals during the course either to reinforce/present a topic or to renew interest when a change of pace is needed. References are made to a 60-minute cassette containing live air traffic control recordings and 107 simulated recordings used as models of the phraseology used in a certain transactions with a pilot. (GLR)

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A COURSE IN ENGLISH
FOR
AIR TRAFFIC CONTROLLERS

by

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and
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INFORMATION BOOKLET FOR PARTICIPANTS ATTENDING
9th WORLD CONGRESS OF APPLIED LINGUISTICS

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INTRODUCTION

"A Course in English for Air Traffic Controllers" came to be written as a result of a project set up in 1988 by the British Council in Madrid, Spain, sponsored by the Spanish Civil Aviation Authority. This authority detected a need for better English language training for trainee air traffic services personnel as a result of an increased demand for trained controllers over the next few years. The dramatic increase in demand has come about because of rising levels of air traffic, not only in Spain and Europe, but in the rest of the world. This has increasingly placed more pressure on controllers over the past few years and has thus caused consternation among aviation authorities with regard to air safety. This particular course aims to contribute to the increase in air safety through more controlled and more thorough English language training than has existed to date.

Many people contributed to the design of the course, both from the British Council and the Spanish Civil Aviation Authority, and the authors are particularly indebted to Dr Peter Roe (then deputy representative of the British Council in Spain and now research fellow in ESP at the University of Aston) who was instrumental in the communicative task based design of the course, to Christopher Dove (Direct Teaching Operation Manager, British Council Evening School Madrid) for his guidance and overall co-ordination of the project, to D. Francisco Javier Sáez Nieto (Director General of the Spanish CAA) and to D. Rafael Benito Loste (Director of Studies and Control Licences at the Madrid ATC training school). Thanks are due to many other people, too numerous to list, without whom the present format of the course would not have been possible.

The course is now being taught on a regular basis at the Spanish Civil Aviation training school, where teaching programmes are being co-ordinated with trainees' theoretical grounding in air traffic control practice and procedure. The material has also been presented to ATC representatives from several European countries, both formally and informally, and has enjoyed an excellent reception from all those who have inspected it. The British Council is at present in negotiations with a publisher with a view to publishing the course worldwide in the coming year. Copyright of the course belongs to the Spanish Civil Aviation Authority within Spain and to the British Council in the rest of the world.

The aim of this booklet is to show the principles on which the course is based and to demonstrate the mechanics of the course. It is also intended as a complement to a previous presentation of the material with practical exercises, cassette tape recordings and video sequences of classes which have taken place in the Madrid training school. At the present time the course presentation consists of :-

- | | |
|-------|--|
| (i) | student's book |
| (ii) | teacher's book including hourly lesson notes |
| (iii) | cassette tape of simulated dialogues |
| (iv) | cassette tape of live traffic recordings |

The British Council in Madrid, sponsored by the Spanish Civil Aviation Authority, has also developed a series of English language tests designed for administration before commencement of ATC training and on completion of ATC programmes. The course is compatible with these existing tests, and in the coming year work will begin on a joint British Council/ Eurocontrol project to produce an exit test for trainees who have completed their training. This will be designed specially for Eurocontrol for implementation in its member states. Future expansion of this project may take place to embrace Eastern European states and perhaps even other countries on a worldwide scale in an attempt to harmonise training and testing in English language with a view to improving safety and achieving the projected aim of free movement of labour within air traffic services.

COURSE DESIGN

The course aims to teach students in the following areas :-

- (i) standard radiotelephony
- (ii) non-routine language
- (iii) "general" English

It must be emphasized that the course does not aim to teach students all aspects of ATC, nor does it aim to give students the English for all the situations they may encounter as a controller, but does aim to give practice in most of the routine and non-routine situations they may have to face, to improve their general level of English in all skills, to increase their confidence in using the language and maintain their interest in the language as a tool for communication. It is felt that students need training in all the above areas as although much of a controller's work consists of routine transmission and reception of information, difficulties can arise when faced with situations in which greater linguistic resources are called for. Controllers also work under pressure e.g. blocked or deficient frequencies, radar failure, time constraints etc. and it is thus valuable to train students in an atmosphere which recreates as far as possible their future working environment. Training ideally takes place, therefore, in a language laboratory for a great part of the course.

The course is divided into 4 parts :-

- (i) communicative tasks
- (ii) exercises and activities
- (iii) live recording exercises
- (iv) simulated recordings

It is designed for 160 teaching hours. However, because of the flexible format of the course and the fact that training schools in different countries have varying time quotas allocated to English language tuition, the length may be increased or decreased according to time limitations and/or student needs. An upper intermediate level of English is assumed on entry, although weaker or stronger students should benefit owing to the fact that a great part of the course is self-monitoring. It is designed for use with trainee ATC's and with practising controllers who wish to undertake a refresher course. The latter is particularly useful for controllers stationed in aerodromes with very little English speaking traffic who feel that their level may have deteriorated.

COMMUNICATIVE TASKS

There is a "bank" of 56 communicative tasks which form the backbone of the course. They represent all the parts of a normal flight and each part has one routine task and one or more non-routine/emergency task(s). Each task has two parts - CONTROL and PILOT. Ideally they are performed in a language laboratory, and students are given the opportunity to perform both as controller and pilot. Extra difficulties may be incorporated in task work by introducing interference with background tapes or by two or more pairs performing the task simultaneously in order to generate noise levels similar to those of a control centre.

Before performing a task students are exposed to all the language needed in order to complete it through simulated dialogues, live recordings and listening exercises. The teacher's role during task work is that of monitor and guide.

Students are urged to complete the check question(s) at the end of each task. This will focus their attention on the extent to which they have satisfactorily completed it. It also gives the teacher an idea of how well the students are progressing in terms of speed and proficiency.

The tasks are largely self-monitoring and it is envisaged that students will perform more slowly, quickly, competently to achieve the same outcome. Self and peer assessment is therefore encouraged using a 0 - 9 scale .

Many tasks produce later class discussion with reference to linguistic and/or procedural items, and thus students can practice their general English whilst discussing aeronautical subjects.

(see following pages for examples of communicative tasks and assessment bands)

TASK 43

GIVING TAKE-OFF CLEARANCE

CONTROL: Follow the steps below and give PILOT clearance for take-off. Make sure s/he gives correct READBACK.

- | | | |
|------|---|---|
| 1... | ↓ | CALL PILOT AND ASK HIM/HER TO REPORT
WHEN READY FOR DEPARTURE |
| 2... | ↓ | PILOT REPLY |
| 3... | ↓ | TELL PILOT CLEARED FOR
TAKE-OFF. GIVE WIND SPEED/DIRECTION |
| 4... | ↓ | PILOT READBACK |
| 5... | ↓ | TELL PILOT TO TAKE-OFF
IMMEDIATELY OR VACATE RUNWAY
(GIVE REASON) |
| 6... | ↓ | PILOT REPLY |

Did you get correct readback?

YES	
NO	

TASK 14

DEALING WITH AN EMERGENCY DURING DESCENT

CONTROL: You are Barcelona Control. The pilot of AFR 723 will contact you. Take the necessary steps to help. First read the information given below.

INFORMATION: BARCELONA AIRPORT CLOSED DUE TO SNOW / GERONA
AIRPORT SNOW CLEARANCE DUE TO LAST UNTIL
12.00 / REUS AIRPORT SNOW CLEARANCE NOW
FINISHED. RUNWAY 17 OPEN.

THE TIME NOW IS: 11.50

Where are you going to advise the pilot to land? Airport:

TASK 14

DEALING WITH AN EMERGENCY DURING DESCENT

PILOT: During descent a fire breaks out on board your plane. Your main problem is - Where to land?. Call Barcelona Control to report the emergency. Use the information below.

YOU ARE: AFR 723 - 50 MILES N. BARCELONA - OVER MAKRO
EMERGENCY LANDING : BARCELONA? GERONA? REUS?

MAYDAY - FIRE - DESCENDING
FL... EMERGENCY LANDING
POSITION.

CANCEL DISTRESS
(GIVE REASON)

THE TIME NOW IS 11.50

Where are you going to land?

Airport:

ASSESSMENT SCALE 0 - 9

- 9 native speaker
- 8 near-native competence
as much as would be expected
- 7 level to aim for in each task
a fully competent handling
of the elements involved
- 6 a barely acceptable level
of competence
- 5 has some difficulty in
understanding and conveying
information
- 4 has quite a lot of difficulty
in understanding and conveying
information
- 3 has considerable difficulty in
understanding and conveying
information
- 2 recognition/production of longer
(but isolated) stretches of
language
- 1 recognition and production of
isolated bits of language
- 0 no competence

0-5 unacceptable

6 needs work

7 acceptable

EXERCISES AND ACTIVITIES

This section of the course contains a variety of exercise types and activities to be used at intervals during the course either to reinforce/present a topic or when a change of pace is needed. The first part of the section contains all the listening exercises based on the simulated dialogues. The second part contains, among others, the following types of activity, all designed to improve students' "general" English :-

Vocabulary explanation

students work in groups where one member has a list of words or phrases which have been encountered in task work and s/he must define these to the rest of the group. Each group can then discuss their definitions and at a later stage come together as a class to find the best definition. This is designed to extend student's vocabulary and improve ability to be as clear and concise as possible.

Odd One Out

to provoke discussion and debate and improve general English through discussion. Students decide which item in a list does not belong to that list.

Connections

the teacher dictates series of words to students in teams of 4/5 who must compete to be the first to see the connection and give full justification.

Reading exercises

ranging from those designed to develop skills in skimming and scanning to those included as reading for interest. All texts are related to the world of aviation.

Paired interviews

to develop speaking and listening skills in aviation related general English context, e.g. accident investigation, traffic growth statistics at a certain airport. When performed in a classroom, a great deal of noise and interference will be generated and SS are thus forced to confirm, check and clarify all information given and received, which is an important skill in their future profession.

(see following pages for examples of exercises and activities)

LEVEL INFORMATION LISTENING EXERCISE

Listen to dialogues 12, 13, 14 and 15 and draw an arrow (→) to match the information on the left with the information on the right.

AYC 315	maintaining 6000 feet
EIA 766	maintaining FL 350
SWR 167	cross Barcelona above FL 270
PAA 493	maintain FL 260

■ Now listen to dialogue 15 again. Is the READBACK correct?

■ Listen to dialogue 16 and answer the questions:-

- (i) What is the aircraft callsign?
- (ii) What is CONTROL's instruction?
- (iii) Is the READBACK correct?
- (iv) Could this readback create a potentially dangerous situation?

At Manchester, however, a spokesman said, "On the whole their spirit has been absolutely tremendous. Last night about 5,000 people were here and there were no problems. We further chaos tonight because of the effect of the delays. It couldn't come at a worse time for us - the weekend is the period for to Spanish destinations".

anticipate / major
travel / snowball
peak

Flow was introduced in Britain last year. The is designed to that planes make straight, ... flights. It does not rule out

ensure / stacking
safe / control
system

QUESTIONS

- 1... Think of a title for each paragraph; for example, "Controllers complain", "Long waits" etc.
- 2... Write down 10 words or expressions you think are useful to learn. Compare your list with that of your partner.
- 3... Explain the following phrases :-
 - (i) knock-on effect
 - (ii) stranded passengers
 - (iii) snowball effect

LIVE RECORDING EXERCISES

There is a cassette of around sixty minutes containing live ATC recordings and these expose students to both native and non-native speakers. They also expose students to different accents and speeds of delivery and to varying degrees of clarity/interference. It is thus essential to accustom students to this type of listening practice from the beginning of the course, as this is the environment in which they will find themselves in their future careers.

The recordings can be slotted in where appropriate, either as extra listening practice or as reinforcement of task work. The recordings provoke a great deal of classroom discussion at a later stage, but should ideally take place in a language laboratory.

The recordings cover most parts of a flight, although for obvious reasons it has not been possible to include all routine and non-routine situations.

The section consists of 50 exercises of the following types :-

- | | |
|--------|----------------------|
| (i) | gap fillers |
| (ii) | information transfer |
| (iii) | matching exercises |
| (iv) | ordering exercises |
| (v) | correction exercises |
| (vi) | recall exercises |
| (vii) | sound recognition |
| (viii) | true/false |
| (ix) | multiple choice |
| (x) | prediction exercises |

Around 50% of the recordings deal with fairly routine language/situations, whilst the other 50% have been carefully chosen to expose students to non-routine language/situations.

(see following pages for examples of live recording exercises)

LIVE RECORDING EXERCISE 2

(i) Listen to the recording and answer the following questions:

When can KLM 363 expect approach clearance?

What does SAS 583 request?

What is AFR 1552's squawk?

When can OAL 247 expect approach clearance?

What frequency is MAH 582 told to call?

(ii) Now choose one of the ACFT below and listen to the recording again. Make notes on all communications between the flight you have chosen and CTRL. Then check with the rest of the class - do you have the same information?

SAS 583	
MAH 582	
KLM 363	

LIVE RECORDING EXERCISE 26

- (i) Before listening, work in pairs and make a list of all the information given in a ROUTE CLEARANCE.

- (ii) Now listen to the clearances and answer the questions:
 - (a) What is DLH's FL?
 - (b) What is DLH's squawk?
 - (c) What is AFR's estimated time of departure?
 - (d) What time will AFR start-up?
 - (e) What is AZA's squawk?
 - (f) What frequency must AZA contact?

- (iii) Now write your own route clearances and read them to your partner - can s/he read them back correctly?

LIVE RECORDING EXERCISE 34

(i) Listen to the recording and fill in the gaps below to show what the PILOT says in each case:-

(a) We're stand 63. At 1045Z we number 22
..... start.

(b) 1217 taxi.

(c) Ground 459 you tell me please we are
..... late? my has just you,
when we taxied and we were in of AZA.
Why are so late in leaving AZA ?

(d) Yes, ... we taxied in, SAB, ... has just
..... airborne, was behind us. We were no.
22 start, SAB was no. 25 start, ...
could you explain me why we so far
..... the queue now?

(ii) What reason(s) does CTRL give?

(iii) What would YOU do/say in this situation?

SIMULATED DIALOGUES

The 107 simulated recordings represent a breakdown of the parts of a normal flight from the moment an aircraft enters a particular sector through to approach and landing, and then ground movement and take-off through to the moment the aircraft leaves a sector.

Varying degrees of interference are incorporated in the dialogues and students are exposed to both native (British and American) and non-native speakers in an attempt to recreate more faithfully the actual working environment of a controller.

Many of the dialogues are "models" of the phraseology used in a certain transaction with a pilot, whereas others do not conform to standard radiotelephony procedures e.g. poor readback, unnecessary words etc. and have been included to heighten students' awareness of the importance of correct procedure and to provoke discussion about the language and possible consequences of not adhering to it. It is important that the teacher draws students' attention to these differences and guides discussion in this area.

Dialogues can and should be revised periodically e.g. in those areas students/teachers feel have caused difficulty : in this sense they are also a useful diagnostic tool for the teacher.

Pre-listening activities can take the form of e.g. brainstorming vocabulary ; listening can take place either in a laboratory or classroom with adequate acoustics ; post-listening can take the form of e.g. discussion, pronunciation practice of "models".

(see following page for examples of simulated recording texts)

- AVA 616 report reaching 1500 feet QFE is 1001 9
- Wilco AVA 616 1500 feet on QFE 1001
- Avianca 616

- BAW 456 report (passing) odd levels 10
- Report passing odd levels BAW 456

- SWR 167 maintain flight level 270 11
- Maintaining flight level 270 SWR 167

- PAA 493 maintain at least 6000 feet 12
- Maintaining 6000 feet PAA 493

- EIA 766 cross Barcelona above flight level 270 13
- Cross Barcelona above flight level 270
- EIA 766

- SWR 167 maintain flight level 350 14
- Maintaining flight level 350 SWR 167

- AYC 315 maintain flight level 260 15
- 260 AYC 315

- BAW 391 maintain at least 6000 feet 16
- Six thousand three niner one

- SAB 334 maintain flight level 230 17
- Could you repeat flight level please, 334

ORDER OF COURSE ACTIVITIES

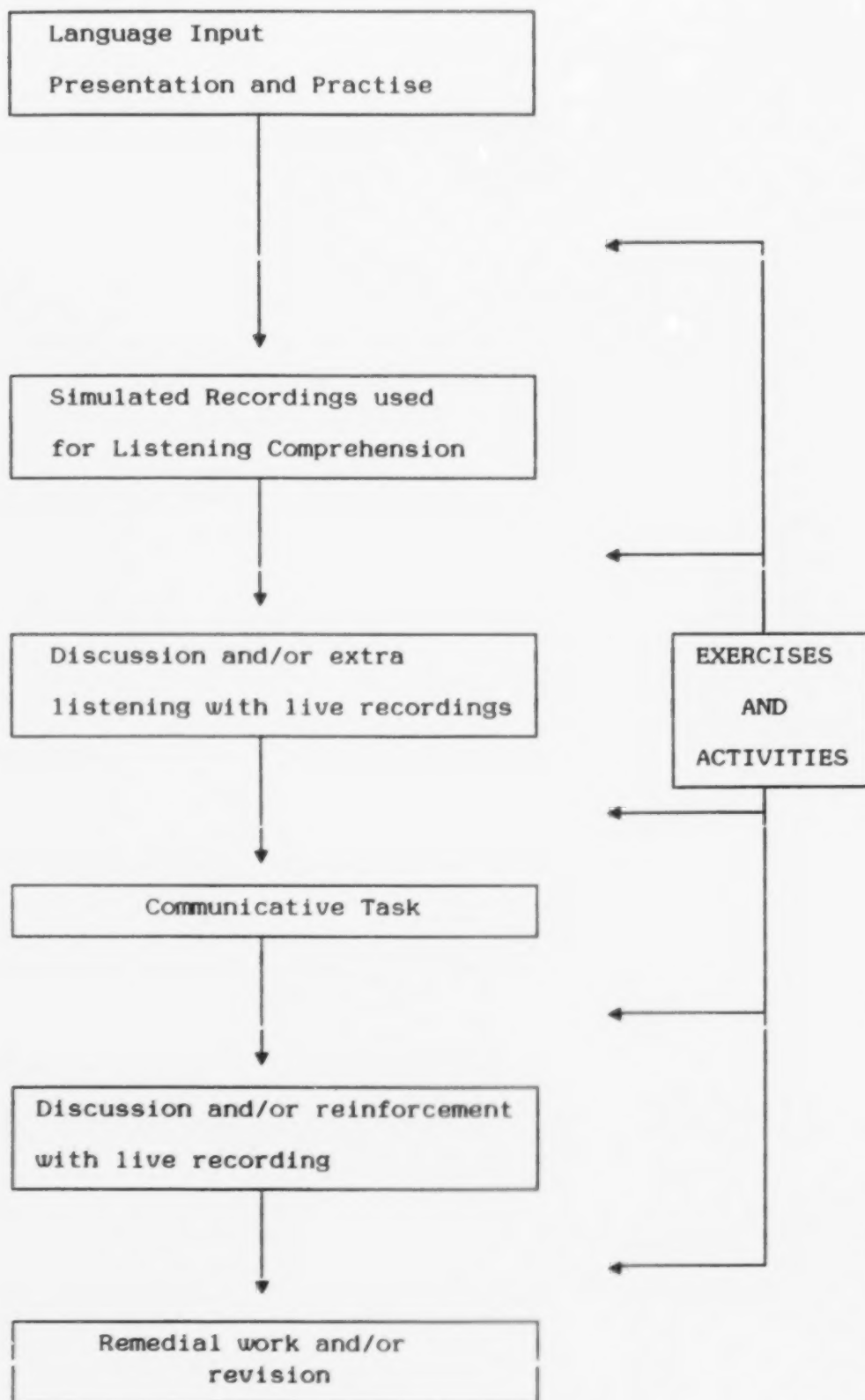
As mentioned earlier, the course has been specially designed for the time allocated to English language training at the Spanish Civil Aviation training school at Madrid Barajas airport, i.e. 160 hours of English per trainee. However, the flexible design will allow the course to be modified by other training establishments in other countries who may have more / less time available.

Therefore, the order of work and the time spent on each activity will depend on time limitations and student needs and thus each teacher/class must decide on what is best for them in their circumstances.

Nevertheless, the basic order of events should follow the order as shown in the diagram on the following page.

For comments and / or further information please refer to the last page of this booklet.

Paul McCann. April 1990.



For further information on "A Course in English for Air Traffic Controllers" and Standard Tests in English on entry to and on completion of Air Traffic Control training programmes, please contact :-

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